

Global Horse Trading: IMF loans for votes in the United Nations Security Council

Axel Dreher[§]

Jan-Egbert Sturm[‡]

James Raymond Vreeland[†]

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Abstract

We investigate whether temporary members of the United Nations Security Council receive favorable treatment from the International Monetary Fund (IMF) using panel data for 197 countries over the period 1951 to 2004. Our results indicate a robust positive relationship between temporary Security Council membership and participation in IMF programs even after accounting for economic, political, and country-specific factors. There is also evidence that Security Council membership reduces the number of conditions included in IMF programs. IMF loans seem to be a mechanism by which the major shareholders of the Fund win favor with voting members of the Security Council.

Keywords: IMF, United Nations Security Council, Voting, Aid

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[§] ETH Zurich, KOF Swiss Economic Institute, Weinbergstrasse 35, CH-8092 Zürich, Switzerland, and CESifo, Germany, E-mail: mail@axel-dreher.de

[‡] ETH Zurich, KOF Swiss Economic Institute, Weinbergstrasse 35, CH-8092 Zürich, Switzerland, and CESifo, Germany, E-mail: sturm@kof.ethz.ch

[†] Yale University, Department of Political Science, USA, E-mail: james.vreeland@yale.edu

Some day, and that day may never come, I'll call upon you to do a service for me. But uh,
until that day, accept this justice as a gift on my daughter's wedding day.

Vito Corleone, *The Godfather*

1. Introduction

In 1992, Zimbabwe entered into an International Monetary Fund (IMF or Fund) arrangement that promised regular disbursements of a loan subject to compliance with economic reform conditions. At the time, Zimbabwe was also serving a two year term on the United Nations Security Council, which was deciding the fate of the aggressor nation Iraq for having invaded its neighbor. The United States was leading an effort to dismantle the military power of Saddam Hussein. During its time as a Security Council member, Zimbabwe voted on several resolutions regarding Iraq that the United States cared a great deal about, including some resolutions that did not receive support from other developing countries. When Zimbabwe failed to support just one resolution against Iraq, however, the country was threatened *by the IMF* with new policy conditions to receive continued installments of the loan (Pilger 2002). Zimbabwe subsequently supported eleven Security Council resolutions opposing Iraq. The United States apparently used its sizeable influence at the IMF to change voting at the Security Council.

Ostensibly designed to facilitate cooperation among states, international institutions often appear simply to reflect the interests of their most powerful members, institutionalizing the advantages of these countries. The picture is, of course, more nuanced than this. Differences across the design and purposes of international institutions generate varying degrees of direct control enjoyed by powerful countries. Yet, apparently distinct international institutions do not operate in a vacuum, and the distribution of power across institutions may serve to reinforce the dominance of key countries. Do countries exercise the authority they have in one international institution to augment their control in another?

We consider this question by looking at the United Nations Security Council (UNSC) and the IMF. The United States, along with its G7 allies, control the lion's share of votes at the IMF.¹ These powerful countries also care about voting at the Security Council. They have good reason. The UNSC has the legal authority to take measures to maintain or restore international peace, including the use of armed force. Developing countries serving on the UNSC thrust themselves onto the international stage where their votes, even when not pivotal, can lend legitimacy to actions supported by the major shareholders of the IMF. These developing-country governments care a great deal about loans from the IMF. We investigate whether trades of loans for votes take place systematically across these two international institutions.

Anecdotes such as the one above, regarding the Gulf War, are perhaps not surprising. Of course countries have used influence in the famous cases. But the notion that there is a systematic relationship between the typical lending practices of the IMF and service on the Security Council is news. Developing countries routinely receive IMF loans for many reasons, mainly economic. IMF programs have come to be taken as a canonical indicator of a need for economic reform (e.g. Haggard and Kaufman 1992). Meanwhile, governments rarely serve on the UNSC. Participation on the UNSC is rather idiosyncratic because of regional representational norms and term limits. Famous cases notwithstanding, most UNSC votes do not make the headlines. So, to find a robust, statistically significant relationship connecting the two institutions is unexpected and has accordingly been overlooked by the literature.

To anticipate our results, we find that temporary Security Council membership does increase the probability of receiving IMF programs. The qualitative results hold even after accounting for economic and political factors, as well as country and year effects. The correlation even survives Extreme Bounds Analysis.

¹ The top five shareholders, the United States, Japan, Germany, France and the United Kingdom, control nearly 40 percent of the votes. The remaining votes are divided among the other 180 member countries.

We proceed as follows. The next section develops our hypothesis and provides some background on the UNSC and the IMF. Section 3 presents anecdotal evidence while the fourth presents rigorous analysis of large-n data. Section five concludes.

2. The Argument

We argue that governments use their influence in one international institution to gain leverage over another. In particular, we consider two institutions that serve different purposes and are valued differently by developed and developing countries. The IMF, where votes are pegged to economic size, tends to be controlled by capital abundant countries and lends foreign exchange to the developing world. The governance of the Security Council is also tipped in favor of developed countries, but poor countries, who represent the bulk of the world's population, are granted a unique voice on important world security issues, which can be of utmost importance to the major shareholders of the IMF. Developing countries may thus value IMF loans more than their votes on the Security Council, and developed countries may value Security Council votes more than the loans the IMF provides.

That developing countries are willing to trade their UNSC votes for IMF loans is probably not surprising. With economic concerns that are severe and security concerns that are primarily domestic or regional, the governments of most developing countries care more about the foreign exchange that the IMF can provide than the global security issues considered important by the IMF's major shareholders. There are notable exceptions, of course. Sometimes the domestic and international political consequences of a vote in the UNSC may outweigh the consequences of foreign aid.² By and large, however, lending from the IMF may easily entice the governments of developing countries.

² We provide examples in the next section.

To see the logic, consider the nature of IMF arrangements. An initial loan installment is provided upfront, with the promise of continued installments, subject to compliance with specific economic policy conditions. For a UNSC member with an IMF arrangement, the implicit promise is that the enforcement of conditionality and the provision of continued loan disbursements depend on their Security Council voting behavior. Upon election to the UNSC, a developing country's government must weigh the probability that a vote will come up during its term where the government would vote against the IMF's major shareholders absent the enticement of the IMF loan. Given this possibility, the government must weigh the costs and benefits of voting against its sincere interest and receiving the loan, versus the costs and benefits of voting sincerely without receiving loan installments. For some exceptional cases, which we discuss in section 3, the expected utility is negative. But for the vast majority of governments, trading UNSC votes for an IMF loan represents a net gain. They simply care more about receiving foreign exchange through the IMF loan than they do about their UNSC votes.

Given that developing countries care more about the IMF loan than their UNSC votes, perhaps the bigger questions are (1) why powerful countries like the United States would care about votes at the UNSC, and (2) why the IMF would be a useful tool to gain leverage over this international body. We address each of these questions in turn.

2.1 The UNSC

For powerful countries, the Security Council is the most important organ of the United Nations (UN); its actions are highly visible, sometimes receiving considerable press, and its duties include taking military action. While five members of the UNSC – China, France, Russia, the United Kingdom, and the United States – serve on a permanent basis, ten others are elected. They serve two years and face strict term limits. They are nominated by their regional caucus and have to be approved by at least two thirds of the votes in the General Assembly.

According to Malone (2000), there is extensive competition for these seats as countries might expect to receive rewards during their tenure. In fact, Kuziemko and Werker (2006) find that average US foreign aid increases by 54 percent and average UN development aid by 7 percent when a country is elected to the Security Council. Yet, despite sometimes intense competition, elections have produced rather idiosyncratic patterns of participation over time. This is partly due to strictly enforced term limits and partly due to norms of equitable geographical representation both across and within regions.³ To be sure, economically powerful countries like Japan, Germany, and Canada win election more often than other countries, but then they must sit out, and even countries like Guyana, Cape Verde, and Thailand get a turn. There are some small countries that – try as they might – never win election (like the Dominican Republic), but there are other small countries that have served multiple terms (like Costa Rica). And then there are some big countries, like Mexico – so far from God, so close to the United States⁴ – that have preferred in the past not to run for election. So, while selection to the UNSC is by no means a random draw, with respect to many economic and political factors it might as well be.

UNSC decisions on substantive matters require a majority of nine votes. Each member has one vote, but the five permanent members have veto power. Thus, the votes of four out of the ten temporary members are required, in addition to all five votes of the permanent members.

Why would a powerful country like the United States, for example, care about the votes of small countries serving on the UNSC? Of course, the United States bears a smaller share of the burden of international campaigns if it acts through the UNSC rather than taking unilateral action (Sandler and Hartley 1999). Yet, with less than half of the votes of the elected members required for measures to pass, elected members are rarely pivotal. O’Neill (1996) shows that the

³ Africa is the most equitable, Asia the least, with Eastern Europe, Latin America and the Caribbean, and the Western European and Others group in between (Dreher and Vreeland 2008).

⁴ Statement famously attributed to Porfirio Díaz, 19th century President of Mexico.

cumulative voting power of all ten elected members is less than two percent of total voting power (according to the Shapley-Shubik index).

One rationale is insurance. Even if few votes are required for a minimum winning coalition, the United States may seek out the support of elected UNSC members to secure insurance votes. It is well established in the vote-buying literature that over-sized coalitions tend to be established (see, e.g., Volden and Carrubba, 2004). This is especially true if votes can be bought at low cost.

There also may be reasons beyond the formal voting rules that concern powerful countries. The United States and other important countries may seek the support of the UNSC for reasons of legitimacy. Legitimacy may be both moral and informational. Members of the UNSC have access to sensitive documents and private discussions regarding the importance of taking international action.⁵ To the extent that the UNSC is a legitimizing force, every single vote matters. This view is consistent with the observation that there is a premium for getting (near) unanimous votes (see, e.g., Doyle 2001: 223). In the absence of UNSC legitimacy, domestic public support might be more difficult to achieve and the US Congress might be recalcitrant (Voeten 2001, Hurd 2007, Hurd and Cronin 2008).⁶ Chapman and Reiter (2004) indeed find that “Security Council support significantly increases the rally behind the president (by as many as 9 points in presidential approval)... This [robust] effect is unique among international institutions

⁵ Adjacent to the public meeting room of the UNSC is a private room where much of the real negotiations take place. We are grateful to Jean Krasno for this suggestion. Note that this line of argument follows the literature on the informational role that committees serve in the US Congress (see, for example, Gilligan and Krehbiel 1987). We are grateful to Joanne Gowa for this suggestion. In contrast to arguments about legitimacy, Fang (2006) argues that leaders seek approval by the UNSC to (falsely) signal their type to voters. She argues that under certain conditions, sincere and insincere leaders regarding their foreign policy intentions may both bring actions before the UNSC.

⁶ Voeten (2001) provides examples. He cites the memoirs of James Baker (1995: 278), emphasizing domestic support to be the main reason for the US government to seek a multilateral solution to the Gulf War. He also cites Malone (1998: ix), arguing that it was easier for the Clinton administration to secure support of the UNSC as compared to those of the US Congress.

because other actions by the UN or regional security organizations do not significantly affect rallies.”⁷

2.2 Why use the IMF

Even if the major shareholders of the IMF care about UNSC votes, why use the IMF to influence them? Why not simply rely on direct aid packages? The benefits of indirect aid are actually quite substantial. We identify *political cover* benefits, *leverage* benefits, and *cost* benefits.

Security Council votes are almost always traded behind the scenes because most countries prefer to conceal vote trading arrangements to escape public condemnation (Eldar 2008). Using the IMF for *political cover* further obfuscates the process. As argued by Vaubel (1986, 1991, 1996), delegating “dirty work” to international organizations allows governments to escape nationalist resentment. This holds for both donor and recipient countries.⁸

An additional benefit of using the IMF is that *leverage* is explicitly built into the arrangement through conditionality. Recall that the IMF does not provide the entire loan upfront, and – in principal – continued disbursements are conditioned on economic policy changes. The IMF Executive Board, however, has the final word on all disbursements and has discretion in

⁷ For a general argument and a case study of the Gulf War, see Thompson (2006).

⁸ The executive branch of the US government tends to have unfettered control of representation at the IMF, with only occasional direct Congressional oversight, such as when seeking to increase the US contribution to the IMF (for example, in 1983 and 1998). Interestingly, Broz and Hawes (2006) and Broz (2008) show that domestic politics matter here. Congressional representatives who receive larger contributions from large private banks, who might benefit through IMF lending, are more likely to approve increases. Representatives of high-skill, pro-globalization districts also favor increases. See also Bird and Rowlands (2001). One interesting possibility raised by a reviewer is that the executive branch of the US government may rely on the IMF to pressure developing countries more when facing divided government, that is, when the legislative branch is controlled or partially controlled by a different political party. We explored this possibility by controlling for the years of US divided government (1955-61, 1969-1977, 1981-1993, and 1995-2003; see Mayhew 2005). We tested an indicator variable for divided government along with the indicator interacted with UNSC membership. Our initial results are interesting – IMF lending is actually more common under divided government and lending to UNSC members is also more common under divided government. Yet, when subjected to analysis with control variables under various specifications, we do not find these results to be robust. Thus we do not pursue this in our large-n analysis below. We nevertheless find the hypothesis a plausible avenue for additional research, as this aspect of IMF lending has not, to our knowledge, been explored.

deeming countries compliant (Stone 2002, 2004, Harrigan et al. 2006). Many argue that the major shareholders exercise their power to pursue international political goals. While the Board certainly must contend with the Fund's internal rules, and all studies of the determinants of IMF lending show that economic variables guide IMF lending, a growing body of literature indicates that international politics matter as well.⁹ As noted in the introduction, Pilger (2002) specifically claims this leverage was put to use in the case of Zimbabwe.

Finally, there are *cost* benefits. To put it bluntly, when they provide foreign aid through the IMF, the major shareholders pay a fraction of the cost (Eldar 2008). Arguably, there is a trade-off between employing one's own funds and using the IMF's money. On the one hand, US policymakers may be able to influence international organizations almost as much as they can use their own resources, as shown by McKeown (2008), who draws from recently declassified documents. According to one of the internal documents, "when the United States has used its available resources for control and influence, it has not suffered a major defeat on a major issue of policy in the organizations surveyed" (p. 11). On the other hand, transaction costs increase. In addition to negotiating with the (potential) recipients of the funds, the United States has to leverage its influence on the international organization and convince other major shareholders to agree.¹⁰ Thus the IMF may be a less effective tool when the major shareholders disagree on a specific resolution (Copelovitch 2007). The relative efficiency of using the IMF therefore depends on the perceived costs of achieving consensus among the major shareholders and the reduced costs of not needing one's own funds.

⁹ See Sturm, Berger and de Haan (2005) and Steinwand and Stone (2008) for reviews. For in depth consideration of international political factors, see Thacker (1999), Stone (2002, 2004), Dreher and Jensen (2007), Oatley and Yackee (2004), Barro and Lee (2005).

¹⁰ Beyond this, the US administration must coordinate its bilateral aid decisions with the Congress, which controls the purse strings but does not get involved in IMF loan approvals. On the other hand, US influence on the IMF must contend with the Fund's internal rules and procedures. The IMF is far from being a mechanical instrument of its dominant shareholder, but is an organization based on flexible rules that guide its policies under "normal" and "exceptional" circumstances. US administration thus has to bear additional negotiating costs when involving the Fund. We thank a referee for this suggestion.

Yet, all of the major shareholders can easily agree that temporary members of the UNSC are potentially important, and when developing countries serve they may be easy to sway. Should a significant issue come up during the tenure of such a temporary UNSC member, it behooves the major shareholders to have the country in their debt, and IMF arrangements are a low cost way to achieve this goal. Thus, we suspect that the major shareholder representatives on the IMF Executive Board are made well aware by their home governments of the potential importance of developing countries serving on the UNSC. If temporary UNSC members request, the IMF's major shareholders facilitate Board approval for the loan, with the implicit promise that the loans will be cut off if they misbehave on the UNSC.¹¹ As suggested by the epigraph, it is best for all IMF major shareholders to put the elected UNSC members in a position of owing them favors.¹²

3. Anecdotal Evidence

Even a casual look at the history of developing countries serving on the UNSC reveals coincidences that corroborate our hypothesis.

Consider Gabon. From independence (1960) until 1977, the country never served on the UNSC and never had an IMF arrangement. Then in 1978 it served on the UNSC for the first time and entered into its first IMF arrangement. The story of Tanzania is similar. From independence (1961) until 1974, there was no UNSC membership and no IMF loan. In 1975, Tanzania began its first UNSC term and entered into its first IMF arrangement. The IMF claims that international politics had nothing to do with the decision to lend to Tanzania; instead, a spokesman for the institution claims "Tanzanian loans were driven in large part by the oil crisis after the Arab oil

¹¹ It is not just the United States who cares, of course. Consider the second largest shareholder at the IMF, Japan. Japan cares a great deal about the UNSC, as evidenced by its attempts to get a permanent seat (see Weiss 2007), and by its numerous successful attempts to get elected to the UNSC (more than any other country).

¹² The logic of the incentive approach to gaining policy favors is explored more recently in Dorussen (2001).

embargo” (*Washington Post* Wednesday, November 1, 2006; Page A19). Yet the policy conditions associated with this arrangement were notably weak, something that has been pondered by scholars for years (see Stein 1992, Vreeland 2003).

Recalling from the introduction the example of Gulf War Zimbabwe, it turns out that this is not the only suspicious evidence regarding this country. Zimbabwe also entered into two separate IMF arrangements in 1981, when the government was not on the UNSC, and 1983, when the government was serving on the UNSC. The first loan was 38 million SDR. The second loan was 300 million SDR. The size of the loan was an order of magnitude higher when the government was serving on the UNSC.

Returning to Gulf War examples, Romania served 1990-1991. The government signed an IMF arrangement in 1991 for 380.5 million SDR, of which 318.1 million SDR was disbursed. Why such generous treatment? Consider its voting record on resolutions pertaining to Iraq. Romania voted in favor of *every* US-supported resolution.¹³ Ecuador was also a member of the UNSC around the time of the Gulf War (1991-2). The government of Ecuador entered into an IMF arrangement in 1991, and ended up receiving nearly 20 million SDR from the IMF. How did Ecuador vote on the UNSC with respect to Iraq? While abstaining on two resolutions, it voted for 12 other resolutions against Iraq.¹⁴

There are, certainly, limits on the extent of political manipulation of the IMF. The IMF is, at its core, an international bureaucracy staffed with technocrats who perform their day-to-day duties according to the economic guidelines laid out in the IMF’s Articles of Agreement. So, oil-rich Trinidad and Tobago, for example, did not receive a loan of foreign exchange from the IMF when it served on the UNSC in 1985-1986. And developed countries, such as Japan and

¹³ That is, Security Council resolutions 660-62, 664-67, 669, 670, 674, 677, 678, 686-89, 692, 699, 700, 705, 706, 707, 712, and 715.

¹⁴ The government abstained on 687 and 773, but voted for resolutions 686, 688, 689, 692, 699, 700, 705-07, 712, 715, and 778.

Germany, never take IMF loans in return for UNSC service even though they usually vote with the United States.

Perhaps the most telling cases, however, are those that do not fit our story at all. Cuba served on the UNSC in 1990-1991 and did not receive IMF financial support. The Cuban government consistently opposed the US resolutions over the Gulf War. Of course, this government had nothing to lose with respect to the IMF because it could not have received a loan. Castro left the IMF in 1964, claiming the institution was a tool of the United States and Western Capitalism.

And then there is the infamous case of Yemen. When Yemen failed to vote in favor of the use of armed forces against Iraq in 1990, for obvious reasons of domestic and regional politics, Secretary of State Baker passed a note to the ambassador from Yemen stating “That is the most expensive vote you have ever cast” (Bandow 1992). The United States subsequently cut all of its 70 million dollars in aid. Despite dire need, Yemen was not granted an IMF arrangement for six years.

One could, however, easily dismiss the anecdotes we present here. We have seen such skepticism before. An early draft of this paper was covered by a reporter for the *Washington Post*, who confronted the IMF with some of our cases. A spokesman for the IMF contended, “the evidence is anecdotal and circumstantial” (*Washington Post* Wednesday, November 1, 2006; Page A19). With such skepticism in mind, we turn to more rigorous analysis of large-n data.

4. Data, Method, and Results

Consider what we observe¹⁵: Our full dataset includes 7,146 country-year observations of 197 countries from 1951 (the first year of IMF Stand-by Arrangements) to 2004. The panel is unbalanced because dates of independence differ, some countries cease to exist, and others join or leave the IMF, but we do observe all independent country-years for the time period. There are no missing data in this full sample.

Our dependent variable is IMF participation, an indicator variable coded 1 if a country participates in an IMF program during part of the year and 0 otherwise.¹⁶ Our principal explanatory variable of interest is UNSC membership, an indicator variable coded 1 if a country is temporarily serving on the UNSC, and 0 otherwise. In the aggregate, governments participate in IMF programs 28.9 percent of the time, and they serve as temporary members of the UNSC 6.5 percent of the time. Serving on the Security Council is thus a relatively rare event, whereas participation in IMF programs is rather common.

As Figure 1 illustrates, governments not serving on the Security Council participate in IMF programs only 28 percent of the time, while governments serving on the UNSC participate 34 percent of the time, a difference which is statistically significant at the 1 percent level. The rate of participation in IMF programs is higher during UNSC service than it is during the years before and after service. Indeed, rates of participation the years before and after membership are not statistically different from rates of participation in the other non-UNSC years. In other words, the increase in IMF program participation rates does appear to be driven by UNSC membership. Note that the overall pattern becomes even more pronounced when we restrict our attention to lower and middle income countries, as indicated by the circles on Figure 1 (the difference

¹⁵ Appendix A summarizes the sources and definitions of all of the variables we use (here and below), while descriptive statistics are reported in Appendix B.

¹⁶ Following most studies, we restrict our attention to participation in Stand-by, Extended Fund Facility, Structural Adjustment Facility, and Extended Structural Adjustment Facility/Poverty Reduction and Growth Facility arrangements.

increases to more than 10 percentage points and is significant at the 1 percent level). As we indicate above in section 2, this is perhaps the more relevant comparison since only these countries are likely to be open to trading UNSC votes for IMF loans.

In fact, Figure 2 shows that this pattern holds at varying levels of strength for every developing region in the world – Africa, Asia and the South Pacific, and Latin America and the Caribbean. The differences between members and non-members of the Security Council are highly significant. The basic pattern holds, but is notably weak in Eastern Europe (probably because of Cold War politics, which we address below). It disappears for the Middle East and North Africa, where Security Council votes are known to be costly to bribe or reward because of the salience of issues involving Israel or alliances during the Cold War. It may not be worth the effort of powerful countries to push the IMF to assist these countries, especially since IMF loans have little impact in countries rich in oil and foreign reserves. Not surprisingly, the pattern also does not hold for industrialized countries, which ceased to participate in IMF programs in the 1970s.

Figure 2 also reports separate results for the Cold War period, splitting countries according to their membership in one of the major alliances (NATO or the Warsaw Pact) or not: “aligned” versus “not aligned.” The idea is to focus on only those countries that can reasonably be expected to engage in vote trading. Arguably, countries belonging to the Warsaw Pact would not be willing to trade votes following US pressure. Countries belonging to NATO would vote with the United States anyway. As can be seen, Figure 2 confirms this hypothesis.

Does the pattern described above hold when put to more rigorous tests? To explore this, we analyze various statistical models with IMF program participation as our dependent variable and UNSC membership as the principal explanatory variable of interest.

The first statistical model we use is a simple pooled logit. We follow Cameron, Gelbach, and Miller (2006) and Thompson (2006) and cluster the covariance matrix in the country and year

dimension simultaneously.¹⁷ This provides cluster-robust inference allowing for both serial and spatial correlation. The effect of being a temporary member on the UNSC is significant at the five percent level and implies (as also shown by Figure 1) an increase of 6 percentage points of the likelihood of receiving an IMF program. To control for possible country-specific effects, we subsequently introduce country dummies. Although the coefficient estimate is somewhat reduced (implying an effect of 4.2 percentage points), it is still significant at the five percent level. The models are presented in columns (1) and (2) of Table 1.

To further reduce the likelihood of having an omitted variable bias in our coefficient estimate for UNSC membership, we employ various sets of control variables on top of the country fixed effects. Column (3) includes the most robust predictors of IMF participation following the Extreme Bounds Analysis (EBA) of Sturm, Berger and de Haan (2005): foreign reserves, debt service, investment, past participation, and lagged election. We also include additional control variables which have been identified in the literature as important: the (log) level of GDP per capita and its growth rate, an indicator variable coded 1 for autocracies and 0 for democratic regimes, a variable measuring the presence of checks and balances, budget surplus, the rate of inflation, changes in international reserves, and the current account balance.¹⁸

While column (3) includes all additional variables, column (4) applies a general-to-specific methodology in which insignificant variables are step by step deleted from the specification.¹⁹ As can be seen, foreign reserves have the expected positive effect according to

¹⁷ Cameron, Gelbach, and Miller (2006) and Thompson (2006) point out that a multi-way clustered covariance matrix can be constructed by adding the two non-nested clustered covariance matrices together, then subtracting the relevant White matrix to avoid double counting. This approach also works for nonlinear estimators such as logit and probit. The variance estimator extends the standard cluster-robust variance estimator or sandwich estimator for one-way clustering and relies on similar relatively weak distributional assumptions.

¹⁸ See Sturm, Berger and de Haan (2005) for a detailed description of the associated hypotheses.

¹⁹ From the largest sample of 7,146 to the sample with all of the control variables with just 1,143 observations we lose 377 observations from the G7 countries, 1,284 other Western European and industrialized countries, 482 observations from Eastern Europe and Central Asia, 1,967 observations from Africa and the Middle East, 902 observations from Asia and 991 observations from Latin America. From a

column (3), at the ten percent level of significance. Note, however, that the effect is not significant according to the general-to-specific specification shown in column (4). Following Trudel (2005), we suspect that the fixed country effects may be picking up the effects of exchange rate regimes, as countries with floating exchange rates may have little need for IMF loans to shore up currency.

At the one percent level of significance, participation in IMF programs is more likely with higher debt service, lower investment, lower per capita GDP, previous participation in IMF programs, and more checks and balances. The results are easy to explain: More debt leads to more need for the IMF. Many creditors, such as the Paris Club, for example, require an IMF arrangement to be in good standing for debt negotiations to take place.²⁰ Low investment and per capita GDP are indicators of need, increasing supply and demand for IMF programs. Past participation increases current participation as the political costs are arguably higher for the first, as compared to follow-up agreements (Vreeland 2003). Countries with more checks and balances are more likely to turn to the IMF because such governments seek out the IMF to bring about political leverage for economic reform, as Vreeland (2003) argues, or because they have trouble reacting to economic crises. The likelihood of IMF participation also rises with the government's budget surplus, with a coefficient significant at the one percent level according to column (3), and respectively, the five percent level according to column (4). The story behind this effect may be one of supply: controlling for other factors, the IMF prefers fiscally conservative countries.

The dummies for autocracies and lagged elections are not significant at conventional levels, and neither are the rate of inflation, GDP per capita growth, and changes in international reserves. The current account balance is also not significant at conventional levels, which is in

time series perspective we lose 2,204 observations as we have no longer data from 1951 to 1974. 1,763 observations drop out due to the inclusion of fixed country effects.

²⁰ Marchesi (2003) tests whether countries having arrangements with the IMF are more likely to obtain a rescheduling of their external debt than others. She concludes that the adoption of an IMF program works as signal of a country's "good intent" which is rewarded with debt relief.

line with Conway (1994). Indeed, as strange as it may seem, considering that the IMF mandate calls for the organization to help countries facing balance of payments problems, the evidence that IMF program participation is not closely related to balance of payments need has long been known.

Finally, we analyze a “stripped” specification, which includes only variables for which there are ample data. Many important control variables suffer from a great deal of missing data – reducing the samples analyzed in the above mentioned models to only about 1,200 observations, out of the 7,146 observations in the full dataset. The “stripped” or “large sample” specification allows us to test the generality of our findings while still controlling for at least those variables that have reasonable data coverage: past participation, per capita GDP, and the dummy for autocratic regimes. The estimated effects of the covariates are in line with those reported previously, based on almost 4,400 observations.

Turning to our variable of main interest, temporary UNSC membership, we find a strong and significant impact regardless of the choice of control variables. Its coefficient is significant at the one percent level according to all three specifications. As other combinations of control variables are also possible, we further check whether the results are sensitive to specification changes employing Extreme Bounds Analysis. The variables included in column (5) are included in all regressions, while up to three of the additional variables in column (4) enter in all possible combinations. Appendix C describes the method in detail and summarizes the results. Normally, few results survive such analysis (see Sturm, Berger and de Haan 2005), but UNSC participation has a remarkably robust effect on IMF participation. We conclude that the choice of control variables does not affect the impact of UNSC membership on IMF program participation.

Table 2 presents further robustness tests (focusing on the “stripped” specification).²¹ First, we check whether our results are driven by the Cold War period. On the one hand, vote buying may have been more important during the Cold War. On the other hand, with the end of the Cold War, countries are less constrained by alignments and might be more likely to vote according to their preferences when not being bribed. Economically weak countries no longer need protection by their bloc, and now need to be bribed to achieve alignment. Vote buying might thus prevail in the post-Cold War era, as our Gulf War anecdotes above indicate. We also test whether the effect of UNSC membership depends on income, as we would expect.²²

As shown in columns (1) and (2) of Table 2, the effect of UNSC membership is positive both during and after the Cold War, with coefficients significant at the five and ten percent level of significance, respectively. So, while there is more variance in the post-Cold War period, our results indicate a continuing positive relationship between UNSC service and IMF participation.

Turning to per capita GDP, as we would expect, the effect of UNSC membership matters only for low and middle income countries (columns (3) and (4) of Table 2). This is consistent with our argument above that poor countries care more about financing from the IMF than they do about their votes at the UNSC, and thus are willing to make a trade.

Maybe countries and their specific problems receive increased attention by the world press when entering the UNSC, thereby increasing the probability of Fund support? We doubt this is the case. Our results only hold for countries that could reasonably be expected to engage in vote trading during the Cold War, as suggested by Figure 2 and corroborated by columns (5) and

²¹ The qualitative results are not affected by the choice of covariates in these regressions either. However, the number of observations in some of the regressions would substantially reduce the reliability of the estimates.

²² As an additional test, we checked whether there is an interaction between autocratic regime and UNSC membership. Dictatorships might be easier to bribe (Kuziemko and Werker 2006). The same might hold for closer allies of the United States (Kuziemko and Werker 2006). We follow the previous literature and measure political proximity to the United States by a country’s voting pattern in the UN General Assembly. We also tested whether the effect of UNSC membership increases during years in which key diplomatic events take place. We employ Kuziemko and Werker’s operationalization: they consider how much press the UNSC received in a year. None of these additional tests yielded statistically significant results (not reported but available on request).

(6) of Table 2. Moreover, if increased attention were responsible for the increase in Fund programs, IMF support would remain at high levels at least for some years after serving on the UNSC. As suggested by Figure 1, however, the correlation between IMF programs and UNSC membership is insignificant starting from the first year after UNSC membership. When we test trends over time parametrically and control for other factors, we find that only the first year of UNSC membership has a statistically significant effect (results not reported but available on request).

Although we have added several control variables, the question of endogeneity might still loom over our question. Perhaps, rather than UNSC membership leading to increased participation in IMF programs, causality runs in the opposite direction. Is the prospect of receiving financial support causing countries to enter the UNSC? Or do third, omitted, variables affect the likelihood of entering the UNSC and being under an IMF program alike? We doubt this is the case. According to Dreher and Vreeland (2008), selection to the UNSC is idiosyncratic (even if not completely random). Few variables explain the timing of membership, and these are arguably unrelated to IMF programs: the (logged) number of personnel provided by a country to UN peacekeeping operations, the share of total UN financial contributions provided by a country, the cumulative number of years a country has served on the UNSC, and the first three lags of UNSC participation.²³ Consequently, endogeneity is unlikely to be an issue here.²⁴ Nevertheless,

²³ Other variables considered but not found to be statistically significant include foreign reserves (in terms of average monthly imports), debt service (percent of GNI), investment (percent of GDP), budget surplus (percent of GDP), inflation, current account (percent of GDP), net changes in foreign reserves (percent of GDP), per capita GDP (1995 PPP), change in per capita GDP, executive and legislative elections, political regime, checks and balances in the political system, past IMF participation, IMF participation, and the number of new World Bank programs.

²⁴ The (logged) number of personnel provided by a country to UN peacekeeping operations and the share of total UN financial contributions have positive effects on the likelihood of serving on the UNSC. This is consistent with the guidelines for election laid out in the UN Charter. The principal criteria for electing members to the Security Council include a country's contribution to peace and security. The charter also calls for equitable geographical representation. Accordingly, prior experience on the UNSC has a negative effect, presumably as new countries get their turn. The first three lags of UNSC participation also have expected effects. The first lag has a positive effect because terms are typically two years. The second and third lags are negative because terms are limited to two years.

we consider an instrumental variables approach to explicitly test for the possibility of endogeneity, using the significant determinants of UNSC membership.²⁵ These variables are significantly correlated with UNSC membership, but are unlikely to affect participation in IMF programs directly. According to the results (not presented but available on request), the Davidson-MacKinnon (1993) test for consistency of OLS estimates indicates that we cannot reject the null hypothesis at conventional significance levels in any of the models that we tried, implying that endogeneity is not an issue here.²⁶

In summary, our main finding – the effect of UNSC membership on IMF participation – is robust to the choice of control variables and sample period, although it is sensitive to income group and – in line with our hypothesis – alignments during the Cold War period. Our results do not seem to be affected by potential endogeneity of IMF programs.

Turning to another dependent variable of interest, we analyze the effect of UNSC membership on the *number of conditions* attached to IMF programs.²⁷ The number of conditions has been used as a proxy for the stringency of conditionality in previous studies.²⁸ According to the results of Dreher and Jensen (2007), for example, countries voting in line with the United States in the UN General Assembly receive IMF programs with fewer conditions. Analogously, we expect that temporary members of the Security Council also receive programs with fewer conditions.

²⁵ Note that instrumental variables estimation is not straightforward when both dependent and independent variables are binary. As shown in Angrist (2001), 2SLS is a simple strategy available for this case. If a non-linear (logit) model is estimated instead, the estimator is inconsistent (Angrist 2001). We therefore employ a linear probability approach.

²⁶ Note that while the influence of UNSC membership becomes statistically weaker when using instruments, it remains significant in all models except when we include the full set of control variables, which is not surprising given the inefficiency associated with unnecessarily employing instruments.

²⁷ We also investigated whether *loan size* is affected by temporary UNSC membership. It is not. So, non-UNSC members are less likely than UNSC members to get a loan from the IMF, but if they do obtain one – for other reasons, of course – the size is comparable. This may represent a binding institutional constraint the major shareholders face when using the IMF for political purposes. We are grateful to the reviewers for stressing this point.

²⁸ See IMF (2001), Gould (2003), Dreher (2004), Bulíř and Moon (2004), Ivanova et al. (2005), and Dreher and Jensen (2007). For a critique, see Vreeland (2006).

Our data on the number of IMF conditions are from Dreher (2004), extended in Dreher and Jensen (2007). They refer to 206 IMF letters of intent with 38 countries between 1997 and 2003.²⁹ Note that we have far fewer observations of the number of conditions than we do of IMF participation. This is because for most of its history, the IMF has been a highly secretive, non-transparent institution. In the past, the details of IMF arrangements were not released to the public for years, and even when released they were kept at the IMF archives, not easily available to the public. Only since the late 1990s has the institution opened up, posting recent IMF arrangements on the Fund's web page (www.imf.org). With so few observations, analysis is tentative. Nevertheless, we put the data to rigorous testing. The data display significant over-dispersion, so we estimate Negative Binomial Regressions instead of employing Poisson regression.

Figure 3 presents descriptive evidence of the correlation between UNSC membership and the number of conditions. Countries signing IMF arrangements during their UNSC tenure receive nearly 20 percent fewer conditions. While non-members have to accept 21 conditions on average, temporary UNSC members receive IMF programs with an average of 17 conditions. This difference is statistically significant at the 5 percent level.

Table 3 replicates the previous analysis, including the determinants of IMF programs as control variables. Arguably, the determinants of IMF programs will also determine the number of conditions to some extent. Thus, we employ the "robust" covariates identified in Sturm, Berger and de Haan (2005). Note, however, that we cannot include the past agreement variable as there is no variation across this small sample.³⁰

Columns (1) and (2) report the Negative Binomial Regression results for the number of conditions, controlling for random and fixed country effects, respectively. Neither investment,

²⁹ For the list of countries and number of letters included in the sample, see Dreher and Jensen (2007). We tried replicating the analysis using the IMF's Monitoring Fund Arrangements (MONA) database. However, only two of the program countries with data available served on the UNSC while being under a program.

³⁰ We leave out the other variables from the literature, which have not proven robustly significant because their inclusion leads us to lose too many observations from our already small sample.

debt service, nor foreign reserves has a statistically significant impact on the number of conditions according to the fixed effects model. The number of conditions is likely to be higher, however, following elections. The effect, significant at the ten and five percent levels in the random and fixed effects models, respectively, may result from the IMF imposing stricter conditionality following expansionary policies during the run up to elections. In case we use a general-to-specific approach and step-by-step eliminate insignificant variables from the specification, we end up by only including the lagged election dummy (columns (3) and (4) of Table 3).

With respect to UNSC membership, the coefficient has the expected negative sign and is significant at the five percent level in each of the models. Regarding the quantitative impact of UNSC membership, the results show that UNSC membership reduces the number of conditions by about three conditions according to all specifications. What is the mechanism by which UNSC membership has this effect? As devising the number of conditions is the authority of IMF staff, either the staff lower the number of conditions to appeal to the “lowest common denominator” of Executive Board views, or key members of the Executive Board usurp the power of the staff and reduce the number of conditions for UNSC members.

Thus, we find evidence that UNSC membership reduces the number of conditions a country has to accept under an IMF program. Note that the small number of countries among our sample serving on the UNSC makes these results rather preliminary. With a larger sample size, one could consider examining more independent variables beyond our limited list. One could also take the problem of nonrandom selection into Fund programs into account, as the number of conditions can only be observed for countries under a program. More research is needed and will be more fruitful as transparency pressures continue to make the IMF a more open institution. The Fund must release clear data on conditionality.

To conclude, we summarize the following from our analysis: non-permanent members of the UNSC are more likely than other countries to receive a loan from the IMF and such an

arrangement is likely to have fewer conditions attached than IMF arrangements with non-UNSC members.

5. Conclusion

For decades, scholars have debated whether international organizations are imbued with independent power or whether they are mere reflections of their powerful members. At the same time, scholars have studied the formal relationships that exist between various international organizations. What has received less attention, however, are the informal relationships that exist across international bodies and the ways in which governments exercise their influence in one body to gain leverage over another. Our study represents a first step towards analyzing such relationships.

Given the large-n nature of our study, we do not know who takes the initiative – whether the temporary UNSC members increase their requests for loans, having confidence the IMF will approve – or whether the Fund’s major shareholders approach them. In any case, IMF loans are one mechanism by which the major shareholders of the IMF – mainly the United States, but also Japan, Germany, France and the United Kingdom – can win the favor of voting members of the Security Council.

What may be of particular interest with respect to the case that we have examined is the nature of the trade. Developing countries offer up the legitimacy their UNSC votes provide in return for cash. Developed countries buy this legitimacy obfuscating the process behind a traditionally opaque international institution. Sometimes, the cost of providing legitimacy is too high, as the case of Gulf War Yemen illustrates. Typically, however, trades may be possible across international institutions where developed countries can offer resources through one and developing countries can offer legitimizing support through another. This raises the question of whether there are other international institutions where developing countries can lend legitimacy

in return for loans of hard currency. International courts and human rights regimes come to mind,³¹ as does the UN General Assembly.³²

Does any harm or inefficiency follow? One way of viewing our results is that it is a form of international redistribution. Almost all countries get their turn to participate in the important deliberations of the Security Council, and, when they do, they receive perks in the form of IMF programs so long as they play ball with the truly powerful countries in the world and do not rock the boat. Their role in most deliberations may be practically inconsequential, but they rise to prominence on the international stage and are duly rewarded for their service. Arguably, however, IMF programs concluded for political rather than economic reasons are likely to lead to inferior outcomes. There is a substantial literature suggesting that IMF programs are harmful for economic growth. Perhaps programs concluded for political reasons are more harmful than others.

In terms of the implications for the reform of international institutions, however, we are cautious. Perhaps global horse trading is necessary for international institutions to function, providing countries selective incentives. The alternative to a world without politically manipulated international institutions may be one with no international institutions at all, where major powers pursue foreign policy strictly unilaterally.

What we do find striking, however, is that public debate about the reform of international institutions focuses almost exclusively on representational issues with little attention to the implications for the political manipulation of international institutions. The UNSC, for example, was reformed in 1966 not to bring about greater accountability, but to expand the size to include

³¹ Studies of the puzzling participation patterns of dictatorships in human rights agreements include Hathaway (2007) and Vreeland (2008).

³² Studies that consider the connection between IMF lending and UN General Assembly voting include Thacker (1999), Barro and Lee (2005). Studies of the political manipulation of the World Bank include Frey et al. (1985), Frey and Schneider (1986), and Kilby (2008). Studies examining the impact of voting in the UN General Assembly on bilateral aid include Alesina and Dollar (2000), Ball and Johnson (1996), Boschini and Olofsgard (2007), Alesina and Weder (2002), and Fleck and Kilby (2006). Kilby (2006) employs UN voting patterns in his analysis of donor influence on the Asian Development Bank.

more developing countries. Those currently arguing for the reform of IMF governance call for a redistribution of vote shares so that recipient countries have a greater voice.³³ Yet, changing representation will not change the fact that international institutions can be used to achieve backroom trades; it only changes the names of the players.³⁴ Those debating reform of international institutions should also consider domestic and international political incentives.

³³ See Bird and Rowlands (2006) for a recent discussion.

³⁴ Interestingly, it has recently been proposed that yet another international organization – the European Central Bank – should have a larger say in the IMF, a proposal also supported by the then speaker of the Eurozone, Luxembourg’s Prime Minister Jean-Claude Juncker (see Falk 2006). As yet another proposal, it has been suggested to consolidate European representation at the IMF and assign responsibility to the European commission (Ahearne and Eichengreen 2007). On the representation front, this might allow for more seats around the table to go to other regions of the world. The question of whether this exacerbates political problems, however, is open. Consolidating European votes might bring about more accountability, but if Europe uses its consolidated votes to further short-term political objectives, this might lead to inferior outcomes.

References

- Ahearne, Alan and Barry Eichengreen, 2007, External monetary and financial policy: a review and a proposal, in: Andre Sapir (ed.), *Fragmented Power: Europe and the global economy*, Bruegel, Brussels.
- Alesina, Alberto and David Dollar, 2000, Who Gives Foreign Aid to Whom and Why? *Journal of Economic Growth* 5: 33-64.
- Alesina, Alberto and Beatrice Weder, 2002, Do Corrupt Governments Receive Less Foreign Aid? *American Economic Review* 92, 4: 1126-1137.
- Angrist, Joshua D., 2001, Estimation of limited dependent variable models with dummy endogenous regressors: simple strategies for empirical practice, *Journal of Business and Economic Statistics* 19, 1: 2-16.
- Ball, Richard and Christopher Johnson, 1996, Political, Economic, and Humanitarian Motivations for PL 480 Food Aid: Evidence from Africa, *Economic Development and Cultural Change* 44, 3: 515-537.
- Bandow, Doug, 1992, Avoiding War, *Foreign Policy Magazine* 89 (Winter): 156-174.
- Barro, Robert J. and Jong-Wha Lee, 2005, IMF-Programs: Who Is Chosen and What are the Effects? *Journal of Monetary Economics* 52: 1245-1269.
- Beck, Thorsten; George Clarke; Alberto Groff; Philip Keefer and Patrick Walsh, 1999, New tools and new tests in comparative political economy: The Database of Political Institutions, Development Research Group, The World Bank, Groff: Federal Department of Foreign Affairs (Switzerland).
- Bird, Graham and Dane Rowlands, 2001, IMF Lending: How Is It Affected by Economic, Political and Institutional Factors? *Journal of Policy Reform* 4, 3: 243-270.
- Bird, Graham and Dane Rowlands, 2006, IMF Quotas: Constructing An International Organization Using Inferior Building Blocks, *Review of International Organization*, 1, 2: 153-171.
- Boschini, Anne and Anders Olofsgard, 2007, Foreign Aid: An Instrument for Fighting Poverty or Communism? *Journal of Development Studies* 43, 4: 622-648.
- Broz, J. Lawrence, 2008, Congressional Voting on Funding the International Financial Institutions, Paper Presented at the Political Economy of International Organizations Conference, Ascona, Switzerland. <http://www.cis.ethz.ch/events/PEIO>.
- Broz, J. Lawrence and Michael B. Hawes, 2006, US Domestic Politics and International Monetary Fund Policy, in: Darren Hawkins, David A. Lake, Daniel Nielson, and Michael

- J. Tierney (eds.), *Delegation and Agency in International Organizations*, Cambridge University Press: 77-106.
- Buliř, Aleř and Soojin Moon, 2004, Is Fiscal Adjustment More Durable When the IMF is Involved? *Comparative Economic Studies* 46: 373-399.
- Cameron, A. Colin; Jonah B. Gelbach and Douglas L. Miller, 2006, Robust Inference with Multi-way Clustering, NBER Technical Working Paper No. 327, September.
- Chapman, Terrence L. and Dan Reiter, 2004, The United Nations Security Council and the Rally 'Round the Flag Effect, *Journal of Conflict Resolution* 48, 6: 886-909.
- Conway, Patrick, 1994, IMF Lending Programs: Participation and Impact, *Journal of Development Economics* 45: 365-91
- Copelovitch, Mark, 2007, Master or Servant? Agency Slack and the Politics of IMF Lending, Ms. Department of Political Science, University of Wisconsin, Madison.
- Davidson, Russell and James G. MacKinnon, 1993, *Estimation and Inference in Econometrics*, New York: Oxford University Press.
- Dorussen, Han, 2001, Mixing Carrots with Sticks: Evaluating the Effectiveness of Positive Incentives, *Journal of Peace Research* 38, 2: 251-262.
- Doyle, Michael W., 2001, The New Interventionism, *Metaphilosophy* 32: 212-235.
- Dreher, Axel, 2004, A Public Choice Perspective of IMF and World Bank Lending and Conditionality, *Public Choice* 119, 3-4: 445-464.
- Dreher, Axel and Nathan M. Jensen, 2007, Independent Actor or Agent? An Empirical Analysis of the Impact of US Interests on IMF Conditions, *The Journal of Law and Economics* 50, 1: 105- 124.
- Dreher, Axel; Rainer Thiele and Peter Nunnenkamp, 2008, Does US Aid Buy UN General Assembly Votes? A Disaggregated Analysis, *Public Choice*, forthcoming.
- Dreher, Axel and James Raymond Vreeland. 2008, Idiosyncratic Election to the UN Security Council. mimeo.
- Eldar, Ofer, 2008, Vote-Trading in International Institutions, *European Journal of International Law* 19, 1: 3-41.
- Faini, Riccardo and Enzo Grilli, 2004, Who Runs the IFIs? CEPR Discussion Paper No. 4666.
- Falk, Rainer, 2006, The European View: How to Reform the IMF? How Much Weight for Europe, *World Economy & Development In Brief*, 1/Apr-May (www.world-economy-and-development.org).
- Fang, Songying, 2006, The informational role of international institutions and domestic politics, University of Minnesota, mimeo.

- Fleck, Robert K. and Christopher Kilby, 2006, How Do Political Changes Influence US Bilateral Aid Allocations? Evidence from Panel Data, *Review of Development Economics* 10, 2: 210-223.
- Frey, Bruno S. and Friedrich Schneider, 1986, Competing Models of International Lending Activity, *Journal of Development Economics* 20, 3: 225-245.
- Frey, Bruno S.; Henrik Horn; Torsten Persson and Friedrich Schneider, 1985, A Formulation and Test of a Simple Model of World Bank Behavior, *Weltwirtschaftliches Archiv* 121, 3: 438-447.
- Gilligan, Thomas W. and Keith Krehbiel, 1987, Collective Decisionmaking and Standing Committees: An Informational Rationale for Restrictive Amendment Procedures, *Journal of Law, Economics, and Organization* 3, 2: 287-335.
- Gould, Erica R., 2003, Money Talks: Supplemental Financiers and International Monetary Fund Conditionality, *International Organization* 57, 3: 551-586.
- Haggard, Stephan and Robert R. Kaufman, 1992, *The Politics of Economic Adjustment: International Constraints, Distributive Conflicts, and the State*, Princeton: Princeton University Press.
- Harrigan, Jane; Chengang Wang and Hamed El-Said, 2006, The Economic and Political Determinants of IMF and World Bank Lending in the Middle East and North Africa, *World Development* 34, 2: 247-270.
- Hathaway, Oona A., 2007, Why Do Countries Commit to Human Rights Treaties? *Journal of Conflict Resolution* 51: 588-621.
- Hurd, Ian, 2007, *After Anarchy: Legitimacy and Power in the UN Security Council*, Princeton: Princeton University Press.
- Hurd, Ian and Bruce Cronin (eds.), 2008, *The UN Security Council and the Legitimacy of International Authority*, New York: Routledge.
- International Monetary Fund, 2001, Structural Conditionality in Fund-Supported Programs, February 16, <http://www.imf.org>.
- Ivanova, Anna; Wolfgang Mayer; Alex Mourmouras and George Anayiotos, 2005, What Determines the Implementation of IMF-Supported Programs? In: Ashoka Mody and Alessandro Rebucci (eds.), *IMF-Supported Programs: Assessing Program Design, Implementation, and Effectiveness*, Washington DC: International Monetary Fund, forthcoming.
- Kilby, Christopher, 2006, Donor Influence in MDBs: The Case of the Asian Development Bank, *Review of International Organizations* 1, 2: 173-195.

- Kilby, Christopher, 2008, The political economy of conditionality: An empirical analysis of World Bank loan disbursements, *Journal of Development Economics*, forthcoming.
- Kuziemko, Ilyana and Eric Werker, 2006, How much is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations, *Journal of Political Economy* 114, 5: 905-930.
- Leamer, Edward E., 1983, Let's take the con out of econometrics, *American Economic Review* 73, 31-43.
- Levine, Ross and David Renelt, 1992, A sensitivity analysis of cross-country growth regressions, *American Economic Review* 82, 942-963.
- Malone, David M., 1998, *Decision-Making in the UN Security Council: The Case of Haiti, 1990-1997*, New York: Oxford University Press.
- Malone, David M., 2000, Eyes on the Prize: The Quest for Nonpermanent Seats on the U.N. Security Council, *Global Governance* 6, 1: 3-24.
- Marchesi, Silvia, 2003, Adoption of an IMF Programme and Debt Rescheduling. An empirical analysis, *Journal of Development Economics* 70, 2: 403-423.
- Mayhew, David R., 2005, *Divided We Govern: Party Control, Lawmaking, and Investigations, 1946-2002*, Second Edition. New Haven, CT: Yale University Press.
- McKeown, Timothy James, 2008, How U.S. decision-makers have assessed their control of multilateral organizations: A review of the declassified literature, University of North Carolina, Chapel Hill, mimeo.
- Oatley, Thomas and Jason Yackee, 2004, American Interests and IMF Lending, *International Politics* 41, 3: 415-429.
- O'Neill, Barry, 1996, Power and Satisfaction in the United Nations Security Council, *Journal of Conflict Resolution* 40, 2: 219-237.
- Pilger, John, 2002, How the Bushes Bribe the World, *New Statesman*, September 23.
- Przeworski, Adam; Michael Alvarez; José Antonio Cheibub and Fernando Limongi, 2000, *Democracy and Development: Political Regimes and Economic Well-being in the World, 1950-1990*, New York: Cambridge University Press.
- Sala-i-Martin, Xavier, 1997, I just ran two millions regressions, *American Economic Review* 87, 2: 178-183
- Sala-i-Martin, Xavier; Gernot Doppelhofer and Ronald I. Miller, 2004, Determinants of long-term growth: A Bayesian averaging of classical estimates (BACE) approach, *American Economic Review* 94, 4: 813-835.

- Sandler, Todd and Keith Harley, 1999, *The Political Economy of NATO: Past, Present, and into the 21st Century*, Cambridge: Cambridge University Press.
- Stein, Howard, 1992, Economic Policy and the IMF in Tanzania: Conditionality, Conflict, and Convergence, in: Horace Campbell and Howard Stein (eds.), *Tanzania and the IMF: The Dynamics of Liberalization*, Boulder: Westview Press: 59-83.
- Steinwand, Martin C. and Randall W. Stone, 2008, The International Monetary Fund: A review of the recent evidence, *Review of International Organizations* 3, 2: 123-149.
- Stone, Randall W., 2002, *Lending Credibility: The International Monetary Fund and the Post-Communist Transition*, Princeton, NJ: Princeton University Press.
- Stone, Randall W., 2004, The Political Economy of IMF Lending in Africa, *American Political Science Review* 98, 4: 577-592.
- Sturm, Jan-Egbert and Jakob de Haan, 2001, How Robust is Sala-i-Martin's Robustness Analysis, University of Groningen, mimeo.
- Sturm, Jan-Egbert; Helge Berger and Jakob de Haan, 2005, Which Variables Explain Decisions on IMF Credit? An Extreme Bounds Analysis, *Economics & Politics* 17, 2: 177-213.
- Temple, Jonathan, 2000, Growth Regressions and What the Textbooks Don't Tell You, *Bulletin of Economic Research* 52, 3: 181-205.
- Thacker, Strom C., 1999, The High Politics of IMF Lending, *World Politics* 52: 38-75.
- Thompson, Samuel B., 2006, Simple Formulas for Standard Errors that Cluster by Both Firm and Time, Harvard University, mimeo.
- Trudel, Robert, 2005, Effects of Exchange Rate Regime on IMF Program Participation, *Review of Policy Research* 22, 6: 919-36.
- United Nations, 2006, United Nations Security Council Members. <http://www.un.org/sc/members.asp>
- Vaubel, Roland, 1986, A Public Choice Approach to International Organisation, *Public Choice* 51: 39-57.
- Vaubel, Roland, 1991, The Political Economy of the International Monetary Fund: A Public Choice Analysis, in: R. Vaubel and T.D. Willett (eds.), *The Political Economy of International Organizations: A Public Choice Approach*. Boulder, Co., Westview Press: 204-244.
- Vaubel, Roland, 1996, Bureaucracy at the IMF and the World Bank: A Comparison of the Evidence, *The World Economy* 19: 185-210.
- Voeten, Erik, 2001, Outside Options and the Logic of Security Council Action, *American Political Science Review*, 95, 4: 845-858.

- Volden Craig and Clifford J. Carrubba, 2004, The Formation of Oversized Coalitions in Parliamentary Democracies, *American Journal of Political Science* 48, 3: 521-537.
- Vreeland, James Raymond, 2003, *The IMF and Economic Development*, Cambridge: Cambridge University Press.
- Vreeland, James Raymond, 2006, IMF Program Compliance: Aggregate Index versus Policy Specific Research Strategies, *Review of International Organizations* 1, 4: 359-378.
- Vreeland, James Raymond, 2008, Political Institutions and Human Rights: Why Dictatorships enter into the United Nations Convention Against Torture, *International Organization* 62, 1: 65-101.
- Weiss, Jessica C., 2007, *Powerful Patriots: Nationalism, Diplomacy, and the Strategic Logic of Anti-Foreign Protest in China*. Ph.D. Dissertation, University of California, San Diego, Department of Political Science.
- World Bank, 2006, *World Development Indicators on CD-ROM*. Washington, DC: The World Bank.

Appendix A: Data sources and definitions

| Variable | Description | Source |
|---|---|---|
| IMF participation | Dummy coded 1 if a country participates in an IMF program during part of the year under Stand-by, Extended Fund Facility, Structural Adjustment Facility, and Extended Structural Adjustment Facility/Poverty Reduction and Growth Facility, and 0 otherwise. | IMF Annual Report (various years) |
| Number of IMF conditions | Number of IMF conditions from 206 IMF letters of intent with 38 countries between October 1997 and March 2003. | Dreher (2004), Dreher and Jensen (2007) |
| UNSC | Dummy coded 1 if a country is a non-permanent member of the United Nations Security Council, and 0 otherwise. | United Nations (2006) |
| Past participation | Dummy coded 1 for countries that have previously participated in IMF programs and 0 otherwise. | IMF Annual Report (various years) |
| Lagged election | Dummy variable coded 1 if elections were held the previous year and 0 otherwise. | Przeworski et al. (2000) and Beck et al. (1999) |
| Autocracy | Dummy variable coded 1 for dictatorships and 0 for democracy. | Przeworski et al. (2000) |
| log(real GDP per capita) | Log of real GDP per capita measured in 1995 PPP dollars. | Przeworski et al. (2000) |
| Growth in real GDP per capita | Growth rate of real GDP per capita. | Przeworski et al. (2000) |
| Investment (in % of GDP) | Private and public gross national investment as a share of gross domestic product (GDP). | Przeworski et al. (2000) |
| Inflation | Inflation as measured by the consumer price index transformed by using the formula $(\pi/(100+\pi))$. | World Bank (2006) |
| log(checks) | Log of the number of checks and balances. | Beck et al. (1999) |
| Changes in international reserves (in % of GDP) | Changes in net reserves is the net change in a country's holdings of international reserves resulting from transactions on the current, capital, and financial accounts (in percent of GDP). | World Bank (2006) |
| Current account balance (in % of GDP) | Sum of net exports of goods, services, net income, and net current transfers (in percent of GDP). | World Bank (2006) |
| Foreign reserves (in % of GDP) | Gross international reserves in terms of the number of months of imports of goods and services which could be paid for. | World Bank (2006) |
| Budget surplus (in % of GDP) | Overall budget balance is current and capital revenue and official grants received, less total expenditure and lending minus repayments for central government in percent of GDP. | World Bank (2006) |
| Debt service (in % of GDP) | Total debt service outstanding in percent of GNI. | World Bank (2006) |
| Aligned countries during the Cold War | Countries belonging to either NATO or Warsaw Pact. | |
| Cold War period | Dummy for the years before 1990. | |
| Low and lower middle income countries | Countries in which 2004 GNI per capita was below US\$ 3,255. | World Bank (2006) |

| | | |
|--|--|---|
| log(1 + personnel in UN peacekeeping operations) | Log of the average monthly number of personnel (plus 1) provided by a country to UN peacekeeping operations. | Heldt (2007) United Nations (http://www.un.org) |
| UN financial contributions (in % of total) | Country's share of the total monetary annual contributions to the United Nations. | |
| Cumulative number of UNSC membership years | Sum of total previous years that a country has served on the UNSC. | |

Appendix B: Descriptive statistics

| Variable | Obs. | Mean | Std.Dev. | Min | Max |
|--|-------|--------|----------|---------|---------|
| IMF participation | 7,146 | 0.289 | 0.453 | 0.000 | 1.000 |
| Number of IMF conditions | 154 | 20.299 | 11.989 | 5.000 | 78.000 |
| UNSC | 7,146 | 0.065 | 0.246 | 0.000 | 1.000 |
| Past participation | 6,407 | 0.529 | 0.499 | 0.000 | 1.000 |
| Lagged election | 7,125 | 0.361 | 0.480 | 0.000 | 1.000 |
| Autocracy | 6,407 | 0.569 | 0.495 | 0.000 | 1.000 |
| log(real GDP per capita) | 5,514 | 8.215 | 1.027 | 5.639 | 10.822 |
| Growth in real GDP per capita | 5,490 | 1.728 | 8.157 | -84.060 | 77.690 |
| Investment (in % of GDP) | 5,390 | 22.189 | 8.745 | -23.763 | 113.578 |
| Inflation | 4,606 | 0.110 | 0.149 | -0.277 | 0.996 |
| log(checks) | 3,743 | 0.639 | 0.672 | 0.000 | 2.890 |
| Changes in international reserves (in % of GDP) | 3,719 | -0.009 | 0.042 | -0.483 | 0.489 |
| Current account balance (in % of GDP) | 3,711 | -4.058 | 9.073 | -52.691 | 43.399 |
| Foreign reserves (in % of GDP) | 3,686 | 3.401 | 2.956 | -0.092 | 25.360 |
| Budget surplus (in % of GDP) | 3,149 | -3.267 | 5.835 | -64.493 | 58.713 |
| Debt service (in % of GDP) | 2,760 | 17.172 | 14.170 | 0.000 | 152.270 |
| Aligned countries during the Cold War | 4,425 | 0.162 | 0.369 | 0.000 | 1.000 |
| Cold War period | 7,146 | 0.619 | 0.486 | 0.000 | 1.000 |
| Low and lower middle income countries | 6,770 | 0.578 | 0.494 | 0.000 | 1.000 |
| Upper middle and high income countries | 6,770 | 0.422 | 0.494 | 0.000 | 1.000 |
| log(1 + personnel in UN peacekeeping operations) | 5,570 | 1.373 | 2.372 | 0.000 | 8.981 |
| UN financial contributions (in % of total) | 5,388 | 0.605 | 2.547 | 0.000 | 31.570 |
| Cumulative number of UNSC membership years | 7,118 | 1.796 | 2.494 | 0.000 | 17.000 |

Appendix C: Extreme Bounds Analysis (EBA)

To examine the sensitivity of temporary UNSC membership on participation in IMF programs we apply (variants) of the so-called Extreme Bounds Analysis (EBA) as suggested by Leamer (1983) and Levine and Renelt (1992). EBA has been widely used in the economic growth literature.³⁵ The central difficulty in this research – which also applies to the research topic of the present paper – is that several different models may all seem reasonable given the data, but yield different conclusions about the parameters of interest. Equations of the following general form are estimated:

$$Y = \alpha M + \beta F + \gamma Z + u, \quad (1)$$

where Y is the dependent variable; M is a vector of ‘standard’ explanatory variables; F is the variable of interest; Z is a vector of up to three possible additional explanatory variables, which according to the literature may be related to the dependent variable; and u is an error term. The extreme bounds test for variable F states that if the lower extreme bound for β – i.e. the lowest value for β minus two standard deviations – is negative, while the upper extreme bound for β – i.e. the highest value for β plus two standard deviations – is positive, the variable F is not robustly related to Y .

As argued by Temple (2000), it is rare in empirical research that we can say with certainty that one model dominates all other possibilities in all dimensions. In these circumstances, it makes sense to provide information about how sensitive the findings are to alternative modeling choices. The EBA provides a relatively simple means of doing exactly this. Still, the EBA has been criticized in the literature. Sala-i-Martin (1997) argues that the test applied in the Extreme Bounds Analysis poses too rigid a threshold in most cases. If the distribution of β has some positive and some negative support, then one is bound to find at least one regression for which the estimated coefficient changes sign if enough regressions are run. We

³⁵ See, e.g. Levine and Renelt (1992), Sala-i-Martin (1997).

therefore report not just the extreme bounds, but also the percentage of the regressions in which the coefficient of the variable F is significantly different from zero at the 10 percent level. Moreover, instead of analyzing just the extreme bounds of the estimates of the coefficient of a particular variable, we follow Sala-i-Martin's (1997) suggestion to analyze the entire distribution. Following this suggestion, we not only report the unweighted parameter estimate of β and its standard deviation, but also the unweighted cumulative distribution function (CDF(0)), i.e. the fraction of the cumulative distribution function lying on one side of zero.³⁶

We analyze almost 200 specifications with different combinations of control variables. The variables our EBA includes in all specifications (the M vector) are: Past Participation, GDP/capita (1995 PPP) and the dummy for autocratic regimes. Each regression also includes up to three combinations of (the Z vector): Foreign Reserves, Debt Service, Investment, Lagged Election, Budget Surplus, Inflation, Current Account, Changes in net Reserves, Growth, and $\log(\text{checks})$.

Results of the Extreme Bounds Analysis are summarized in the table below. We present three models, all estimated with conditional logit: the general-to-specific specification, the stripped specification, and the stripped specification focusing on low and middle income countries only. As can be seen, the CDF(0) easily exceeds 0.9 according to all specifications based on a maximum of 175 regressions. Note that even the strict criterion proposed according to the original Extreme Bounds Analysis holds, as the upper and lower extreme bounds are both positive according to all specifications, which is a rare event in empirical research. We conclude

³⁶ Sala-i-Martin (1997) proposes using the (integrated) likelihood to construct a weighted CDF(0). However, the varying number of observations in the regressions due to missing observations in some of the variables poses a problem. Sturm and de Haan (2001) show that as a result this goodness of fit measure may not be a good indicator of the probability that a model is the true model and the weights constructed in this way are not equivariant for linear transformations in the dependent variable. Hence, changing scales will result in rather different outcomes and conclusions. We therefore restrict our attention to the unweighted version. Furthermore, for technical reasons – in particular our unbalanced panel setup – we are unable to use the extension of this approach called Bayesian Averaging of Classical Estimates (BACE) as introduced by Sala-i-Martin, Doppelhofer and Miller (2004).

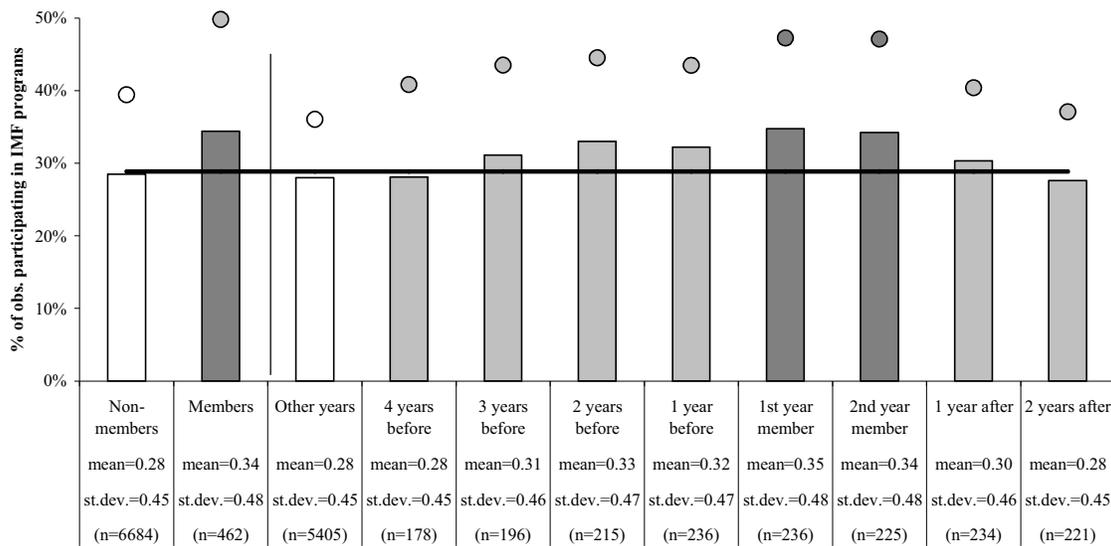
that the relationship between UNSC membership and IMF programs is indeed robust to the choice of control variables.

Appendix C, Table: Extreme Bounds Analyses

| | (1) General-to- specific specification | (2) Stripped specification All countries | (3) Stripped specification Low and middle income countries |
|-------------------------------|---|--|---|
| Average Beta Coefficient | 0.5506 | 0.4347 | 0.4712 |
| Average robust standard error | 0.2028 | 0.1640 | 0.1853 |
| % Sign. at 10% level | 100.00% | 100.00% | 100.00% |
| CDF(0) | 99.57% | 99.31% | 99.17% |
| lower bound | 0.1245 | 0.0008 | 0.0008 |
| upper bound | 1.0522 | 0.9794 | 1.0116 |
| # of combinations | 63 | 175 | 175 |
| Average # of observations | 1,220 | 1,993 | 1,828 |

The baseline variables are listed in Table 1, column (5). The results are based on Conditional Logit estimates. The standard errors are clustered by countries and years. The vector of variables from which up to three are included in each of the possible combinations contain the remaining variables listed in column (4) of Table 1. Low and lower middle income countries are countries in which 2004 GNI per capita was below US\$ 3,255.

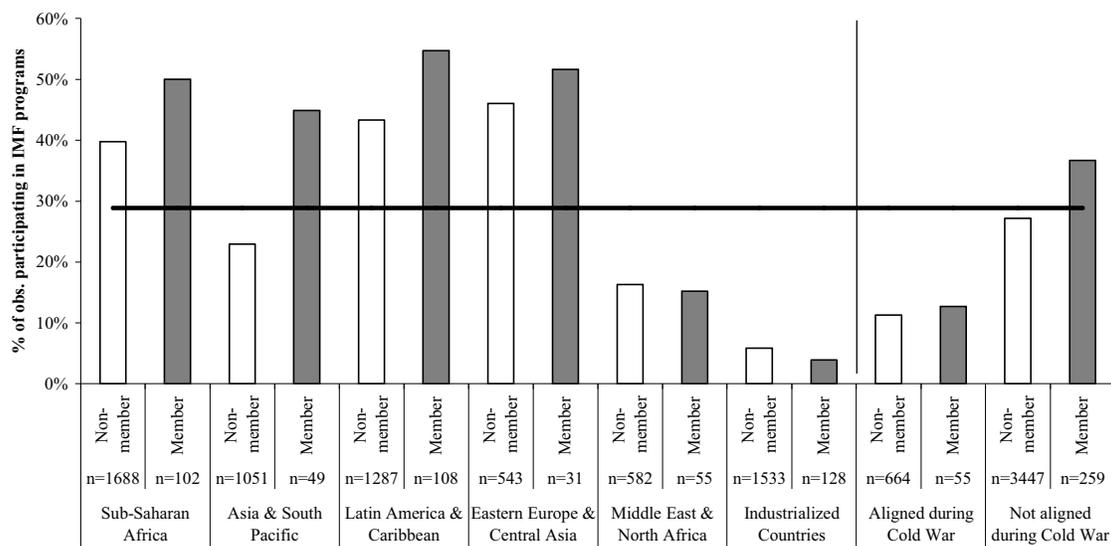
Figure 1: Participation in IMF programs by non-permanent UN Security Council Membership over time



UN Security Council Membership Status

The horizontal line shows the average IMF participation rate across our entire sample. The dots reflect the results in case only low and lower-middle income countries are included.

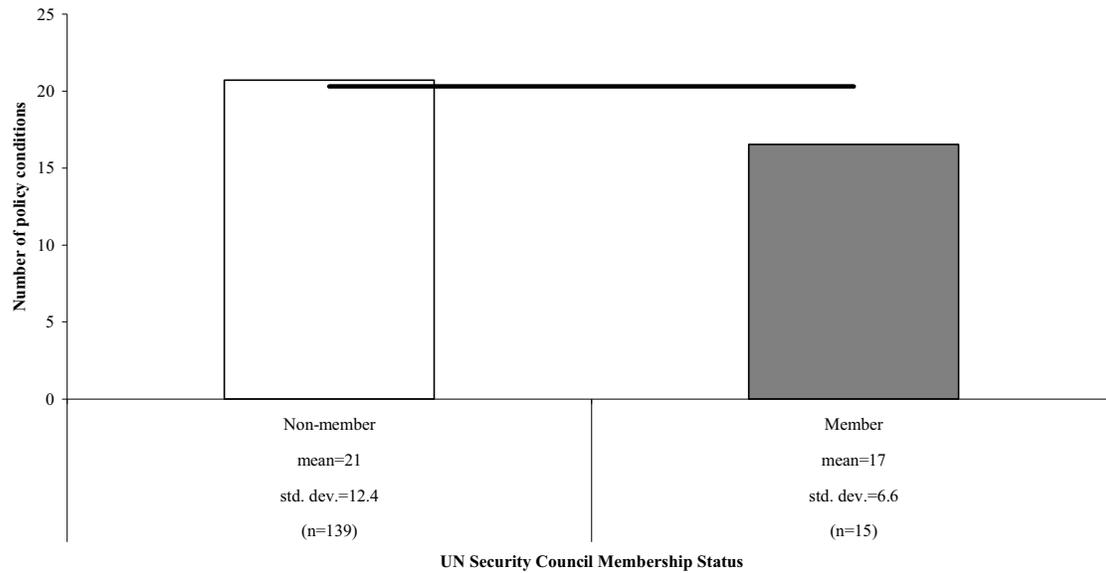
Figure 2: Participation in IMF programs by non-permanent UN Security Council Membership across regions and during the Cold War



UN Security Council Membership Status

The horizontal line shows the average IMF participation rate across our entire sample.

**Figure 3: Number of policy conditions under IMF programs
by non-permanent UN Security Council Membership**



The horizontal line shows the average number of policy conditions across our entire sample.

Table 1: The effect of UN Security Council membership on IMF participation

| | (1) Without control variables Logit | (2) Conditional Logit | (3) Conditional Logit with all covariates | (4) Conditional Logit - general to specific | (5) Conditional Logit - stripped specification |
|---------------------------------------|---|-----------------------------|--|---|--|
| UNSC | 0.2757 (2.36)** | 0.1685 (1.99)** | 0.5557 (2.68)*** | 0.5429 (2.73)*** | 0.3140 (2.64)*** |
| Past participation | | | 2.3250 (7.47)*** | 2.1725 (8.42)*** | 3.0625 (19.71)*** |
| log(real GDP per capita) | | | -1.9427 (32.97)*** | -1.9300 (30.32)*** | -1.5578 (34.47)*** |
| Autocracy | | | 0.1905 (1.01) | | -0.1444 (1.53) |
| Investment (in % of GDP) | | | -0.0226 (2.58)*** | -0.0274 (3.42)*** | |
| Debt service (in % of GDP) | | | 0.0328 (4.01)*** | 0.0241 (4.28)*** | |
| log(checks) | | | 0.2515 (2.69)*** | 0.2078 (2.59)*** | |
| Budget surplus (in % of GDP) | | | 0.0255 (2.68)*** | 0.0217 (2.40)** | |
| Lagged election | | | -0.1771 (1.06) | | |
| Foreign reserves (in % of GDP) | | | 0.0497 (1.92)* | | |
| Growth in real GDP per capita | | | -0.0086 (0.97) | | |
| Inflation | | | -0.1688 (0.44) | | |
| Changes in international reserves | | | 1.6239 (0.81) | | |
| Current account balance (in % of GDP) | | | 0.0139 (1.38) | | |
| Observations | 7,146 | 5,383 | 1,143 | 1,274 | 4,391 |
| Log pseudolikelihood | -4,291.00 | -2,712.76 | -483.37 | -550.34 | -1,812.08 |
| Number of countries | 197 | 141 | 66 | 72 | 129 |
| Number of years | 54 | 53 | 26 | 26 | 49 |

Absolute value of z statistics in parentheses. Standard errors are clustered by countries and years.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 2: Robustness checks using the stripped specification

| | (1) During the Cold War | (2) After the Cold War | (3) Low and lower middle income countries | (4) Upper middle and high income countries | (5) Not Aligned countries during the Cold War | (6) Aligned countries during the Cold War |
|-----------------------------|-------------------------------|------------------------------|---|--|---|---|
| UNSC | 0.3434 (2.51)** | 0.5120 (1.95)* | 0.4342 (2.43)** | 0.1101 (0.56) | 0.3147 (2.41)** | 0.6580 (1.26) |
| Past participation | 3.0238 (18.17)*** | 1.5764 (7.58)*** | 3.2158 (15.78)*** | 2.8414 (10.44)*** | 3.0233 (18.91)*** | 2.6864 (4.98)*** |
| Autocracy | 0.2240 (1.94)* | -0.3103 (3.32)*** | -0.2312 (2.24)** | 0.1121 (0.67) | 0.2615 (2.07)** | -1.8442 (3.38)*** |
| log(real GDP per capita) | -1.7950 (28.40)*** | -1.7282 (41.12)*** | -1.0994 (14.61)*** | -2.2073 (14.46)*** | -1.4704 (23.49)*** | -3.8755 (12.85)*** |
| Observations | 3,068 | 862 | 2,846 | 1,472 | 2,693 | 366 |
| Log pseudolikelihood | -1,208.95 | -347.88 | -1,230.34 | -539.82 | -1,077.82 | -117.93 |
| Number of countries | 104 | 86 | 89 | 38 | 93 | 11 |
| Number of years | 38 | 11 | 47 | 49 | 37 | 34 |

The results are based on Conditional Logit estimates. Standard errors are clustered by countries and years

Absolute value of z statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Low and lower middle income countries are countries in which 2004 GNI per capita was below US\$ 3,255

Aligned countries belong to either the NATO or the Warsaw Pact in the period before 1990

Table 3: The effect of UNSC on the number of conditions in IMF programs

| | (1) Robust covariates | | (3) Stripped specification | |
|--------------------------------|--------------------------|-----------------------|-------------------------------|-----------------------|
| | random country effects | fixed country effects | random country effects | fixed country effects |
| UNSC | -0.3804 (2.40)** | -0.4218 (2.49)** | -0.2873 (2.32)** | -0.3269 (2.56)** |
| Lagged election | 0.9227 (1.72)* | 1.1198 (1.97)** | 0.8801 (1.71)* | 0.9660 (1.84)* |
| Investment (in % of GDP) | -0.0091 (0.97) | -0.0031 (0.26) | | |
| Debt service (in % of GDP) | 0.0024 (0.72) | 0.0055 (0.98) | | |
| Foreign reserves (in % of GDP) | -0.0527 (2.01)** | -0.0434 (1.01) | | |
| Constant | 1.8978 (2.92)*** | 1.4845 (2.00)** | 1.5379 (2.85)*** | 1.4699 (2.64)*** |
| Observations | 124 | 121 | 154 | 150 |
| Number of countries | 33 | 30 | 37 | 33 |
| Log pseudolikelihood | -436.19 | -284.51 | -543.73 | -368.13 |

Absolute value of z statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

The results are based on negative binomial regressions